



CITY OF DURHAM | NORTH CAROLINA

Date: February 14, 2011

To: Thomas J. Bonfield, City Manager
Through: Theodore L. Voorhees, Deputy City Manager
Mark D. Ahrendsen, Transportation Director
Harmon Crutchfield, Assistant Transportation Director

From: Pierre Osei-Owusu, Sr. Transportation Planner

Subject: Automatic Passenger Counters (APC)

Executive Summary

The City has been working in collaboration with Chapel Hill Transit and Triangle Transit to procure an Automatic Passenger Counting (APC) device to be used in improving ridership counts on all fixed route transit service for the three transit systems. APCs automate the passenger data collection process and enable accurate and timely service performance analyses and planning. Currently, DATA collects passenger information mainly through the fare collection (GFI) device. This device is designed primarily for fare collection and not for passenger tallies. Grant funds of \$78,792 in Surface Transportation Program Direct Apportionment (STPDA) are available for this project, as are local match funds that have been identified within the Transit Fund.

Recommendation

It is recommended that City Council authorize the City Manager to accept the FY 2010-11 City of Durham and Federal Transit Administration Section 5307 STPDA Grant by executing the grant documents; and adopt the FY 2010-11 City of Durham and Federal Transit Administration Section 5307 STPDA Grant Project Ordinance, in the amount of \$78,792 to purchase the APC devices.

Background

The City has been working in collaboration with Chapel Hill Transit and Triangle Transit to procure Automatic Passenger Counting (APC) devices to be used in improving ridership counts on all fixed route transit service for the three transit systems. APCs automate the passenger data collection process and enable accurate and timely service performance analyses and planning. Currently, DATA collects passenger information mainly through the fare collection (GFI) device. This device is designed primarily for fare collection and not for passenger counts. The 30 APCs will be purchased and installed on the fixed route buses and insure that more accurate counts of passengers are made. This is important because ridership data is an essential component of the federal and State funding allocation formula and effective service evaluation.

Issues/Analysis

In August of 2010, the Durham-Chapel Hill-Carrboro (DCHC) Transportation Advisory Committee (TAC) approved \$162,837 in Surface Transportation Program Direct Apportionment (STPDA) funds to be transferred from the Federal Highway Administration (FHWA) to the area's Federal Transit Administration (FTA) Sec. 5307 allocation. Those funds are now available to Durham Area Transit

Authority (DATA), Chapel Hill Transit (CHT) and Triangle Transit (TTA) to purchase and deploy 62 APC devices for use by the three transit agencies. Thirty (30) APCs will be installed on DATA buses. Durham's portion of the federal funding is \$78,792 and the local match is \$19,698, bringing the total funding to \$98,490. The devices will be procured through an existing technology agreement between the State of North Carolina and Urban Transportation Associates (UTA), the manufacturer of the APCs.

Currently, the City has only five (5) APC units installed on five (5) buses. This purchase will equip thirty (30) additional buses with this data collection technology, which would significantly improve staff's ability to obtain more accurate and timely passenger count data. This data could then be used to make continual improvements to the transit system in order to provide better transit services to the citizens of Durham. It will also ensure that Durham receives all the federal and State funding to which it is entitled.

Alternatives

- 1) The City can choose not to purchase the APCs. Without the ridership counting device and software, the City will continue to use the current method of passenger counting, which has inherent efficiency and operational limitations. Failure to approve this purchase will result in the forfeiture of the federal dollars approved by the TAC for this project and the funds will have to be returned. This alternative is not recommended.
- 2) Purchase APC's without federal funding. The total cost to the City would be \$98,490. This alternative is not recommended.
- 3) Purchase the APC's with federal funding. The cost to the City would be \$19,698. This alternative is recommended.

Financial Impact

The proposed APC purchase is \$98,490. The TAC-approved federal (STPDA funds) portion is \$78,792, while the local portion is \$19,698. The required local portion has been identified within the Transit Fund. The federal portion has already been transferred from the FHWA to the FTA and is now available as additional Sec. 5307 funding that the City can obtain and use to purchase the APC devices.

SDBE Requirements

SDBE requirements are not applicable to the receipt of Federal 5307 funding.

C: John Tallmadge, TTA